UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 20549

FORM 8-K

CURRENT REPORT
Pursuant to Section 13 or 15(d) of the
Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **January 9, 2017**

Idera Pharmaceuticals, Inc.
(Exact Name of Registrant as Specified in Charter)

Delaware	**001-31918**	**04-3072298**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(IRS Employer Identification No.)

167 Sidney Street
Cambridge, Massachusetts 02139
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: **(617) 679-5500**

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01 Regulation FD Disclosure.

On February January 9, 2017, we uploaded a presentation to our website, www.iderapharma.com, discussing the state of the Company. We may rely on all or part of this presentation any time we are discussing the current state of the Company in communications with investors or at conferences. A copy of the presentation is attached to this Current Report on Form 8-K as Exhibit 99.1 (the "Slides").

By filing this Current Report on Form 8-K and furnishing the information contained herein, the Company makes no admission as to the materiality of any information in this report that is required to be disclosed solely by reason of Regulation FD.

The information contained in the Slides is summary information that is intended to be considered in the context of the Company's Securities and Exchange Commission ("SEC") filings and other public announcements that the Company may make, by press release or otherwise, from time to time. The Company undertakes no duty or obligation to publicly update or revise the information contained in this report, although it may do so from time to time as its management believes is warranted. Any such updating may be made through the filing of other reports or documents with the SEC, through press releases or through other public disclosure.

In accordance with General Instruction B.2 of this Current Report on Form 8-K, the information presented in Item 7.01 of this Current Report on Form 8-K and Exhibit 99.1 shall not be deemed to be "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or otherwise subject to the liabilities of that section, unless the Company specifically states that the information is to be considered "filed" under the Exchange Act or incorporates it by reference into a filing under the Securities Act of 1933, as amended, or the Exchange Act.

Item 9.01. Financial Statements and Exhibits.

(d) Exhibits.

See Exhibit Index attached hereto.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Idera Pharmaceuticals, Inc.

Date: January 9, 2017

By: /s/ Mark J. Casey

Mark J. Casey

Senior Vice President,

General Counsel and Secretary

EXHIBIT INDEX

Exhibit No.	Description
99.1	Investor presentation uploaded to Idera Pharmaceuticals, Inc. website on January 1, 2016

Exhibit 99.1


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2017 JP Morgan Healthcare Conference
January 11, 2017
© 2017 Idera Pharmaceuticals

Forward Looking Statements and Other Important Cautions

- This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of historical fact, included or incorporated in this presentation, including statements regarding the Company's strategy, future operations, collaborations, intellectual property, cash resources, financial position, future revenues, projected costs, prospects, plans, and objectives of management, are forward-looking statements. The words "believes," "anticipates," "estimates," "plans," "expects," "intends," "may," "could," "should," "potential," "likely," "projects," "continue," "will," and "would" and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Idera cannot guarantee that it will actually achieve the plans, intentions or expectations disclosed in its forward-looking statements and you should not place undue reliance on the Company's forward-looking statements. There are a number of important factors that could cause Idera's actual results to differ materially from those indicated or implied by its forward-looking statements. Factors that may cause such a difference include: whether interim results from a clinical trial will be predictive of the final results of the trial, whether results obtained in preclinical studies and clinical trials will be indicative of the results that will be generated in future clinical trials, including in clinical trials in different disease indications; whether products based on Idera's technology will advance into or through the clinical trial process on a timely basis or at all and receive approval from the United States Food and Drug Administration or equivalent foreign regulatory agencies; whether, if the Company's products receive approval, they will be successfully distributed and marketed; and such other important factors as are set forth under the caption "Risk Factors" in the Company's Annual Report and on Form 10-Q for the period ended September 30, 2016. Although Idera may elect to do so at some point in the future, the Company does not assume any obligation to update any forward-looking statements and it disclaims any intention or obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

Happy New Year!!!!

2016 Achievements -

- Completed Enrollment in Phase 1 Dose Escalation IMO-2125 Trial – IPI Arm
- Commenced Dosing Phase 1 Dose Escalation IMO-2125/Pembro Arm
- Presented Clinical and Translational Data at SITC
- Designed clinical program to approval in PD-1 Refractory Melanoma
- Planned additional IMO-2125 trials beyond PD-1 refractory melanoma
- Opened IMO-8400 Phase 2 Trial in Dermatomyositis – 20 Sites initiated and enrollment underway
- Increased number of 3GA compounds to 22 gene targets for potential development
- Executed out-licensing agreement for IMO-9200 to Vivelix
- Strengthened company balance sheet extending cash runway through next 18 months

- Leading to Pivotal 2017

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Addressing Immuno-Oncology's Unmet Need

- Intra-tumoral IMO-2125

Tumor Microenvironment is Key to Improving Treatment Outcomes

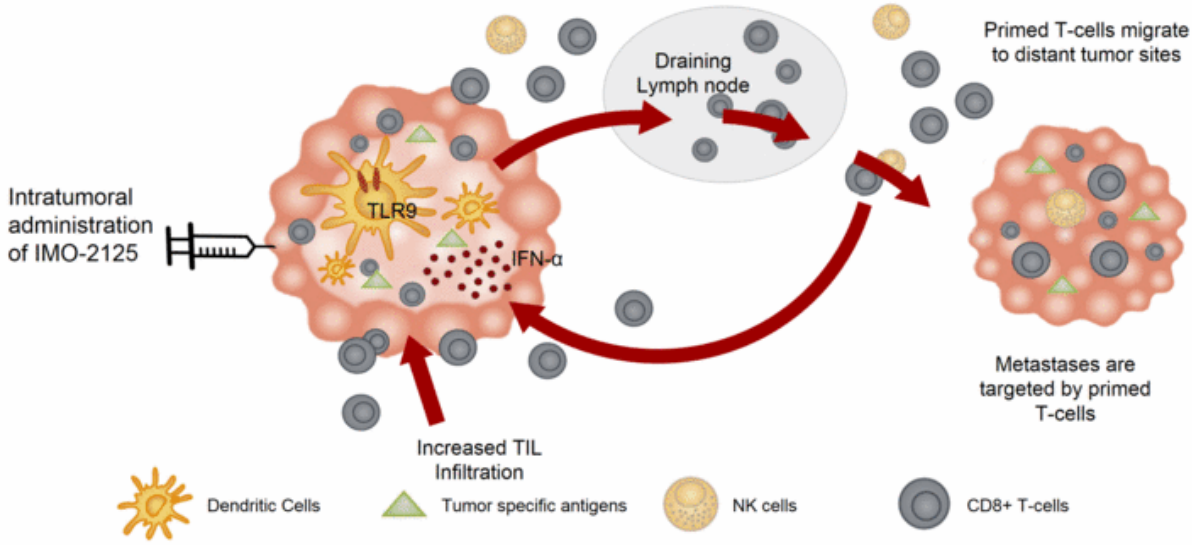
- Despite success of checkpoint inhibitor (CPI) therapy, a significant proportion of patients do not benefit
- Combination of CPIs offers modest improvement juxtaposed by increased toxicity
- Limited options after failure of anti PD-1 therapy
  - Ipilimumab provides 13% ORR[1]
  - Provides path to regulatory approval
- Melanoma is the fastest-increasing tumor worldwide[2] - significant unmet medical need remains

IMO-2125 Initial Development/Commercialization Target is PD-1 Refractory Melanoma

[1] Long GV, SMR, 2016
[2] Weinstock MA. Epidemiology, Etiology, and Control of Melanoma. Med Health R I. 2001;84(7):234-236

Intra-tumoral IMO-2125 Mechanism of Action

Immune Activation in Local Tumor has been Observed to Lead to Systemic Effect in both Animal and Human Trials



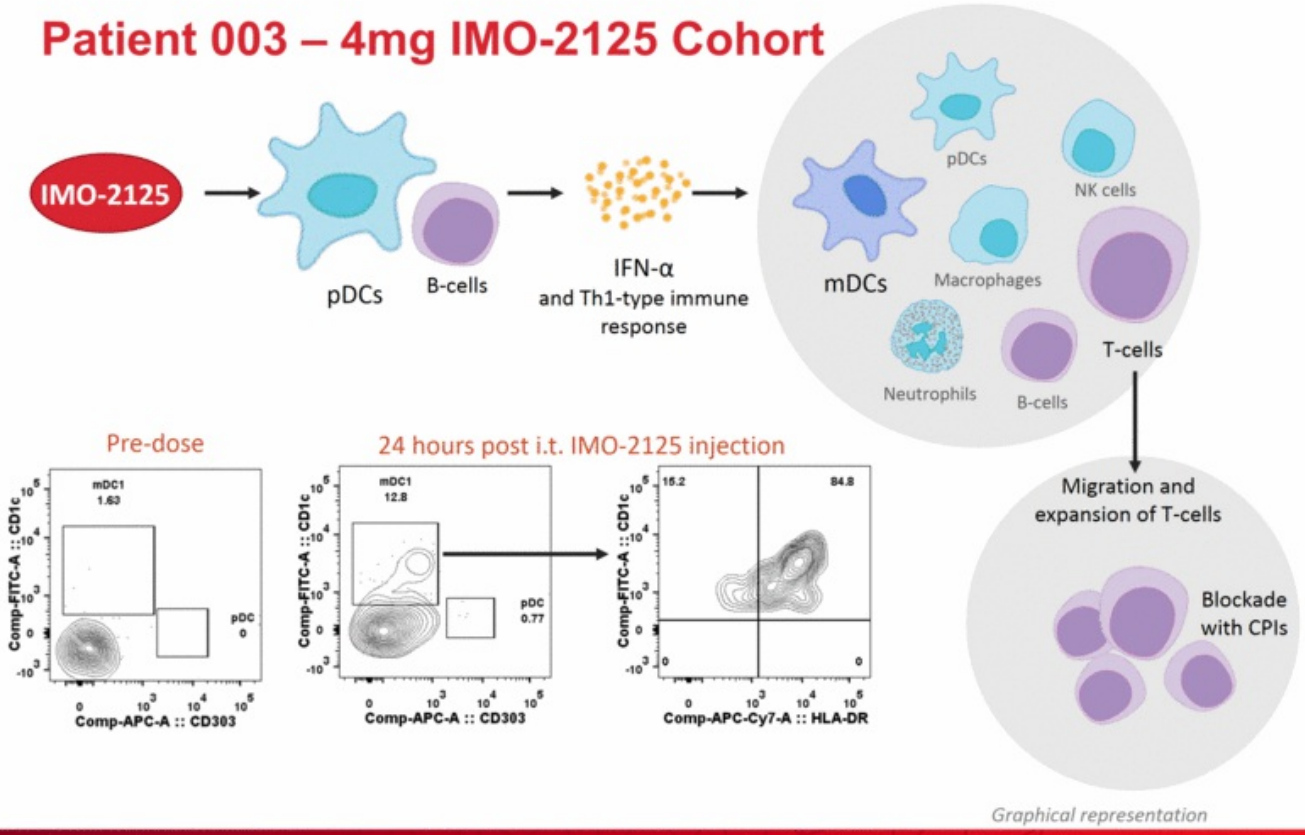
Demonstration of Clinical and Translational Responder

Patient 003 – 4mg IMO-2125 Cohort

- 58 y/o WM with BRAF wild-type melanoma originating base of penis
  - Metastases to inguinal lymph nodes and liver
- Rapid progression on nivolumab (4 cycles) prior to enrollment
- Received 6 doses IMO and 3 doses ipi (last one held for hypophysitis)
  - Well-known AE deemed related to ipi

DC Maturation in the Injected Tumor

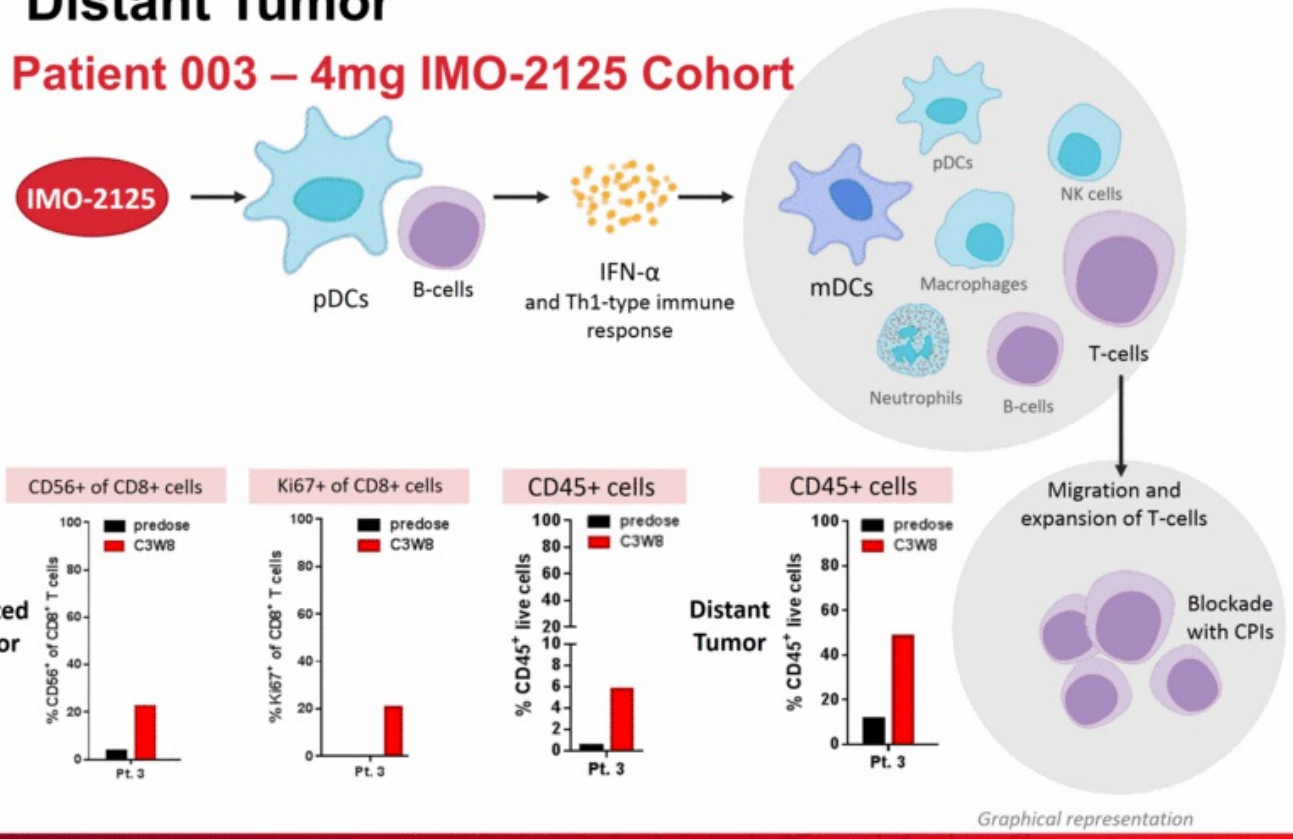
Patient 003 – 4mg IMO-2125 Cohort



Graphical representation

T-cell Activation Occurring in the Injected and Distant Tumor

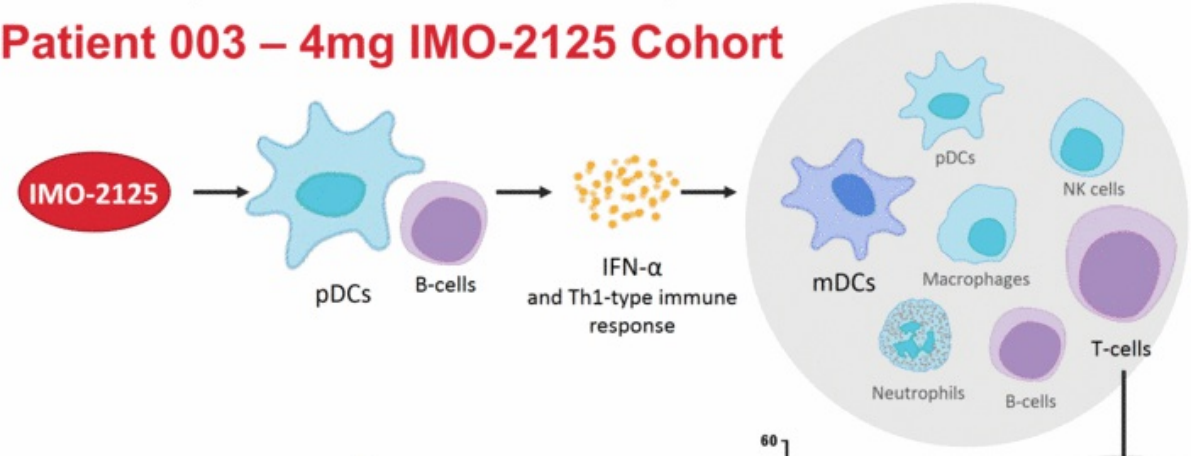
Patient 003 – 4mg IMO-2125 Cohort

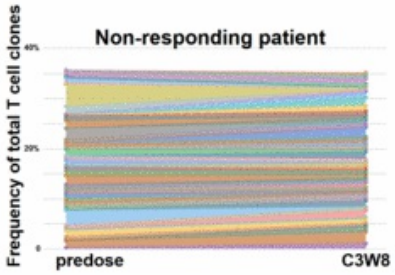


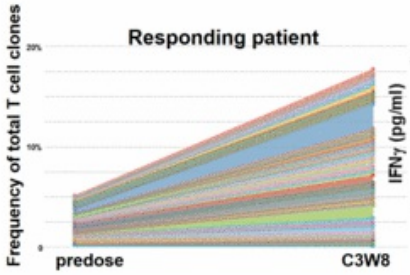
Graphical representation

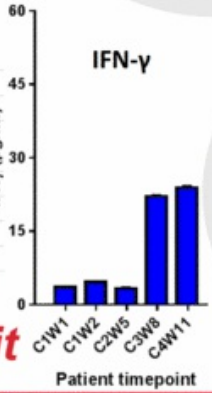
Expansion of top T-cell clones in the distant lesions, induction of IFN-γ

Patient 003 – 4mg IMO-2125 Cohort









Patient 003 Remains PR at 6 Mos. Visit

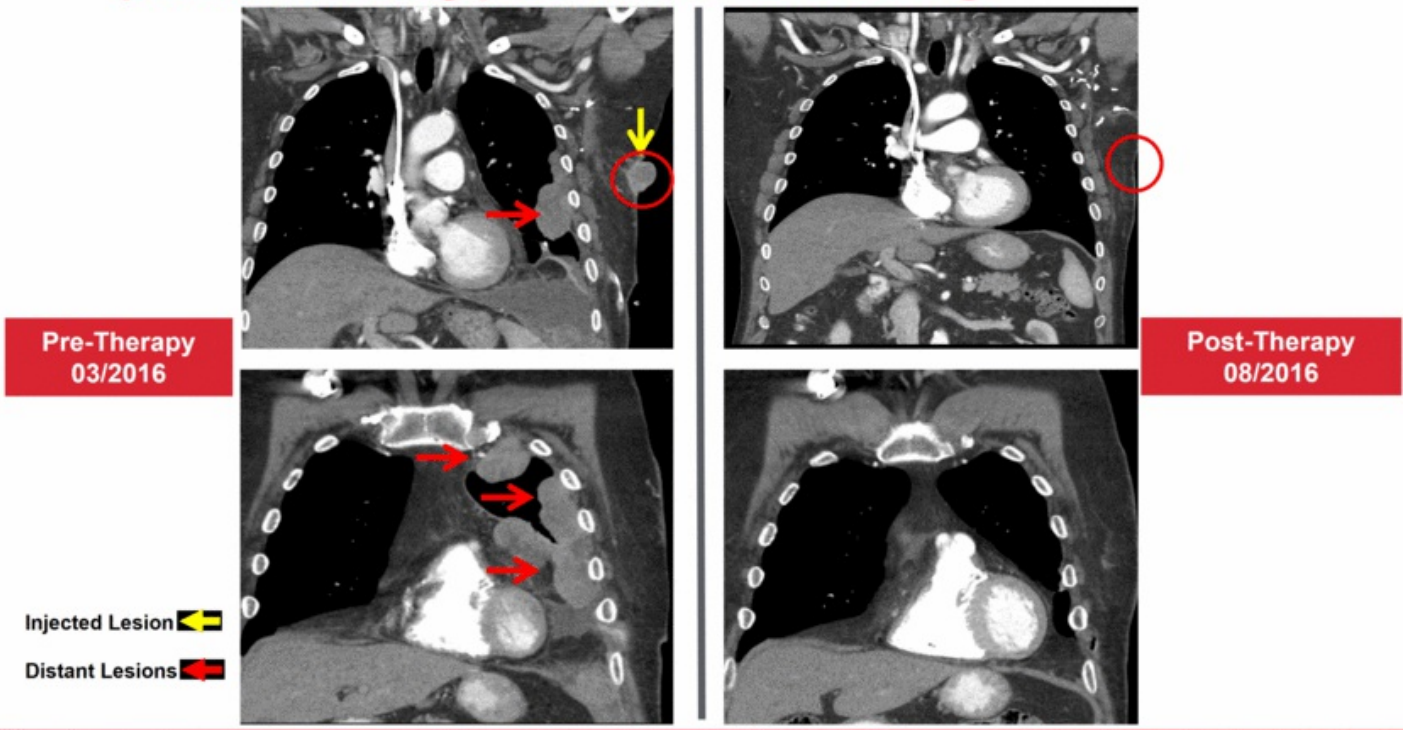
Additional Clinical Responder Case Study

Patient 004 – 8mg IMO-2125 Cohort

- 68 y/o male with BRAF wt melanoma, metastatic to lung (bulky), pleura, LN, widespread soft tissue
- Marked progression on Nivo + Urelumab (anti-4-1BB)
  - Marked progression w/ severe dyspnea
  - Referred to hospice
- Pleural effusion drained, then begun on study treatment
- Received 6 doses IMO + 4 doses ipi
- Dramatic response after 6 wks of therapy
- Investigator-assessed CR at 5 months

Tumor Imaging: Patient 004 Remains a CR at 6 Months Visit

Ipilimumab 3mg plus i.t. IMO-2125 8 mg

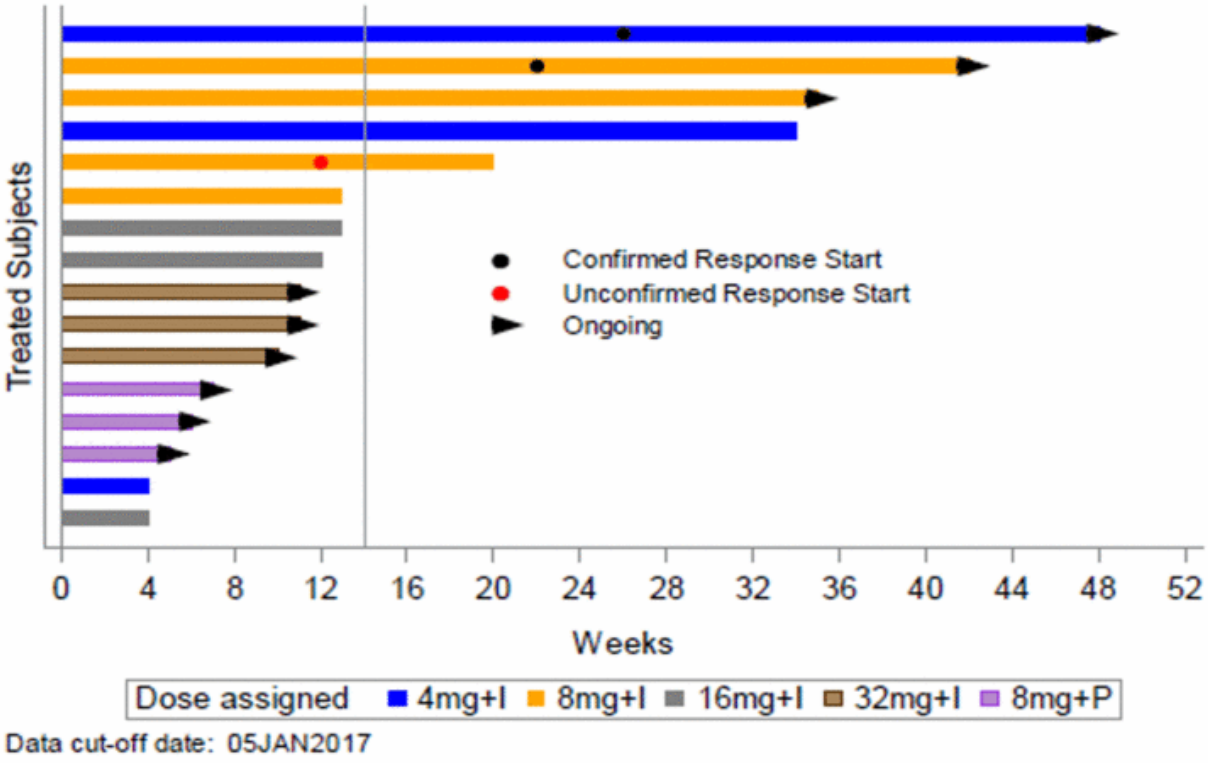


IMO-2125-ipilimumab Combination Development

Additional sites are being added in 1H17 for Phase 2

Enrollment Completed	Ongoing	Planned
Cohort 1 (IMO 4 mg + ipi 3 mg/kg) Cohort 2 (IMO 8 mg + ipi 3 mg/kg) Cohort 3 (IMO 16 mg + ipi 3 mg/kg) Cohort 4 (IMO 32 mg + ipi 3 mg/kg)	Cohort 5 (Backfill) (IMO 8 mg + ipi 3 mg/kg) Cohort 6 (Backfill if needed) (IMO tbd + ipi 3 mg/kg)	Phase 2 (N=21)

Durable Responses with Prolonged Stabilization of Disease



Data cut-off date: 05JAN2017

IMO-2125 in PD1 Refractory Melanoma Path Forward

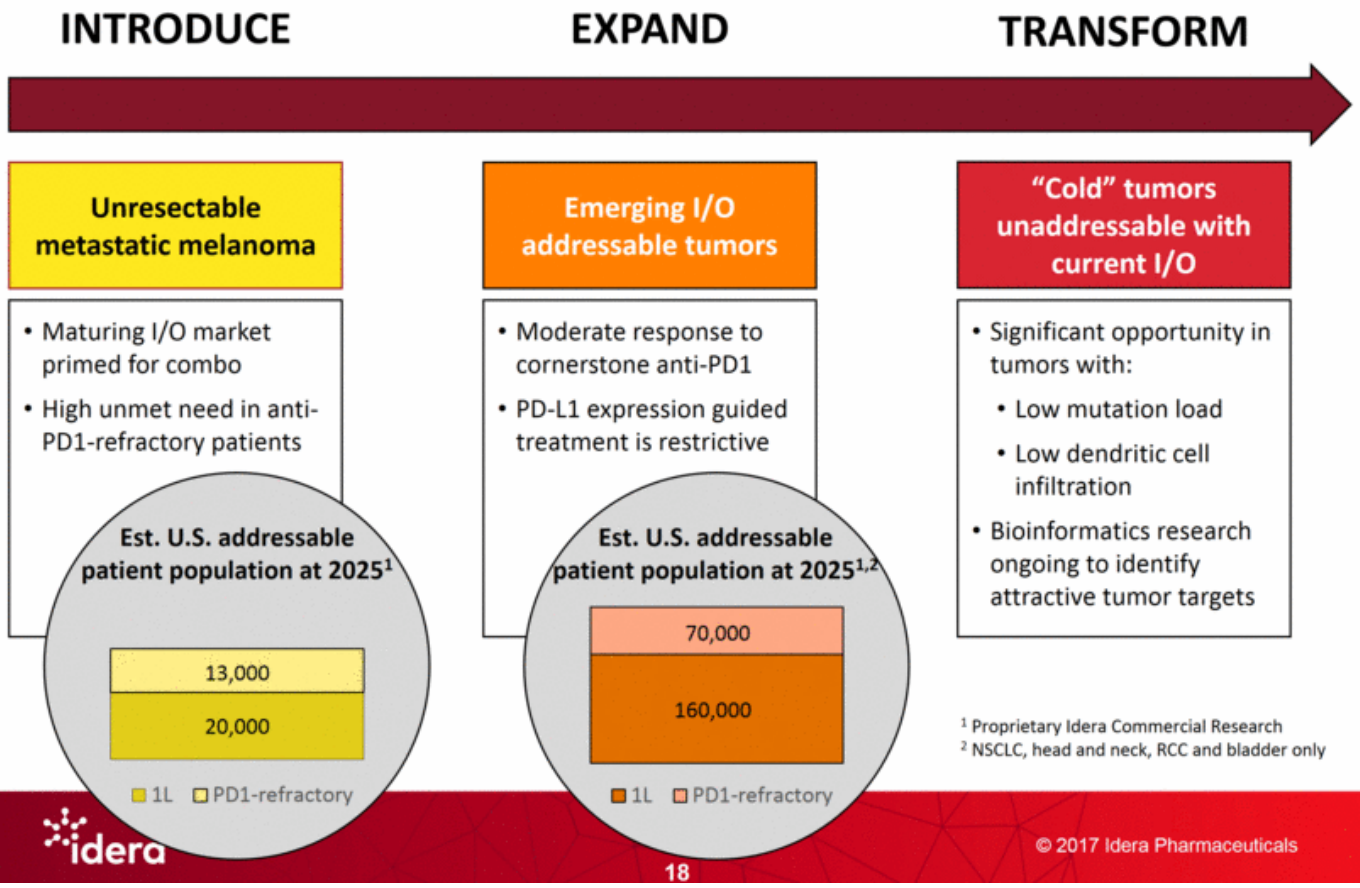
- January data-cut for Q1 2017
  - EOP1 FDA Meeting
- Phase 2 Dose selection anticipated by end of Q2 2017
  - Seamless initiation of Phase 2 portion (N=21)
- Phase 3 design to be finalized post FDA meeting

IMO-2125 Beyond Melanoma

Mechanism of Action Supports Broader Expansion

- To further capitalize in 2017 we plan to:
  - Initiate Phase 1 Multi-tumor type Monotherapy Trial – Q1
    - Critical for registration and exploratory purposes
  - Initiate Phase 2 combo basket study – 2H
    - Multiple CPI combos, multiple tumor types
- Multiple discussions underway for potential clinical development partnerships

Long-term Expansion Opportunity Significant



[1] Proprietary Idera Commercial Research
[2] NSCLC, head and neck, RCC and bladder only

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Providing Hope for a Serious Rare Condition

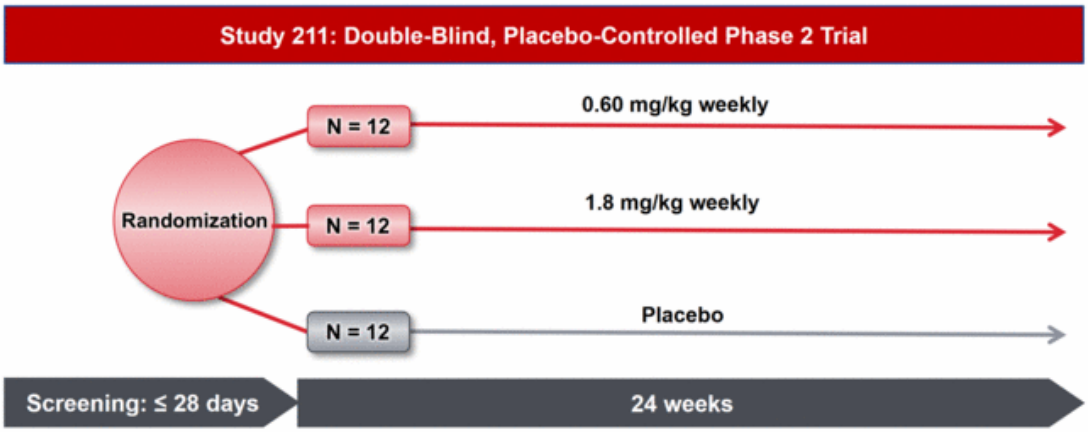
- IMO-8400 to Treat Dermatomyositis

Dermatomyositis

- Rare, debilitating, inflammatory condition associated with increased risk of pre-mature death
- Multisystem disorder affecting both skin and muscle
- Twice as common in women as men
- Affects roughly 25K adults in the U.S.
- Current treatments have limited efficacy and serious side effects
- TLR antagonism may disrupt autoimmune cycle of tissue damage to improve disease symptoms

Phase 2 Trial Enrollment Underway

Phase 2 Data Expected in 2018



Study Design

- 24-week randomized, double-blinded placebo-controlled assessment

Major Eligibility Criteria

- DM diagnosis, aged 18-75 years, active skin and muscle disease, stable regimen of con-meds

Primary endpoint

- CDASI activity score

Exploratory endpoints

- MMT-8, 10-meter run walk, Timed Up and Go test, Four Stair Climb, 5D itch scale, SF-36 health survey

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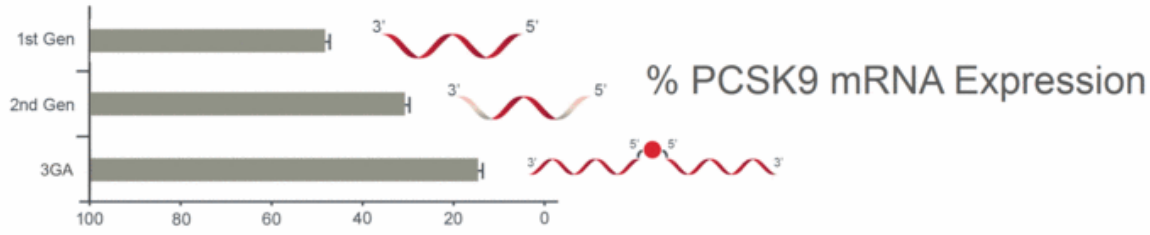
Platform of Unlimited Possibilities

- Demonstrating the Potential of 3GA

Why is a better RNA-directed technology needed ?

Current RNA-focused Platform Technologies Remain Flawed

- 3GA may realize the full potential of antisense technology for the treatment of diverse diseases
- 3GA designed to overcome the limitations of the first and second generation antisense technology:
  - Immunotoxicities
  - Therapeutic Index



Assays were conducted with antisense constructs in Hepa 1-6 cells; RNA levels were quantified by qPCR

3GA Development to Date

22 3GA Compounds Developed to Specific Gene Targets Across Wide Variety of Therapeutic Areas

- Therapeutic areas range across:
  - Rare diseases, oncology, autoimmune disorders, metabolic conditions, single-point mutations, etc.
- Ongoing activity ranges from cell culture through IND-enabling toxicology
- Current portfolio feeds potential for both internal development candidates and partnering opportunities

1st Clinical Candidate for Idera Development Selected

First 3GA Candidate Selected to Enter Clinic

Opportunity to Validate Technology Platform / Advance Into Late Stage Development

- For strategic and competitive purposes, Idera to withhold naming selected target until 2H 2017
  - Well-established liver Target
  - Available pre-clinical animal models
  - Well-known clinical endpoints
  - Potential for broad and rare disease applications
- Potential Value Drivers
  - Establishment of human proof of concept for platform in 2018
  - Differentiation from other RNA-based therapeutic platforms (Improved safety/efficacy)

PROGRAM	MECHANISM	INDICATION	COMMERCIAL RIGHTS	DISCOVERY	PHASE 1	PHASE 2	PIVOTAL
IMMUNO-ONCOLOGY	TLR9 Agonist	IMO-2125 Refractory PD-1 Metastatic Melanoma / CPI Comb.	idera				
		IMO-2125 Monotherapy Additional Tumor Types					
		IMO-2125 Combo Additional Tumor Types – CPI Comb.					
RARE DISEASES	TLR 7,8,9 Antagonist	IMO-8400 Dermatomyositis	idera				
	3GA-NLRP3	3GA Undisclosed Indication					
	3GA-DUX4	3GA Undisclosed Indication					
PARTNERED PROGRAMS	3GA	3GA Renal Diseases	gsk				
	TLR 7,8,9 Antagonist	IMO-9200 Autoimmune Diseases	Vivelix				
Partnering Opportunities – Idera-Sponsored Clinical Development Suspended	TLR 7,8,9 Antagonist	IMO-8400 B-Cell Lymphoma	idera				

Near Term Expected Deliverables

- IMO-2125 Data Updates and Major Medical Meetings Throughout 2017
- Feb 2017 – IMO-2125 Melanoma Study Phase 1 Clinical Data (ASCO-SITC)
- Q1 2017 – Initiate Phase 1 IMO-2125 Monotherapy in Multiple Refractory Solid Tumors Clinical Trial
- 2H 2017 – Enroll IMO-2125 Phase 2 Expansion in Ongoing Clinical Trial
- 2H 2017 – Initiate Phase 2 IMO-2125 Combination Trial in Multiple Refractory Solid Tumors Clinical Trial
- 2H 2017 – Complete Enrollment of IMO-8400 Dermatomyositis Trial
- 2H 2017 – Announce Undisclosed 3GA Development Target and Plan
- Q1 2018 – File IND for First 3GA Compound
- Q1 2018 – Initiate and Enroll First 3GA Clinical Trial

Anticipated R&D Day in 2H 2017

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Thank You